Aluminum-Rich Concentrate from Municipal Waste



Computerized Recovery System Separates Aluminum from Mixed Recyclable Streams

With assistance from the Department of Energy's Inventions and Innovation Program, MSS, Inc., developed a separation technology that electronically detects and removes aluminum cans from municipal solid-waste streams. The separation technology discriminates against tramp ferrous metals in the feed stream. Eddy current sensors first detect and identify aluminum, and after detection, a precisely metered air jet pulse removes the aluminum. The aluminum goes to secondary processing; the other goes to conventional recycling. This recovery system is an improvement over a previous version of the system (the *ELPAC System*) that had been proven in years of demanding service in solid-waste and glass cullet applications.

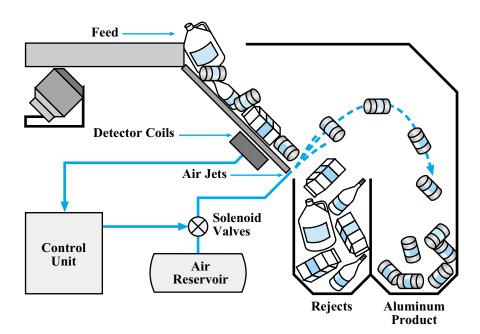
Benefits

Energy Savings

Increases the useful yield of glass and aluminum recycled streams. Using recycled aluminum and glass in production reduces energy consumption compared with glass and aluminum from raw materials.

Emissions Reductions

Using recycled aluminum and glass in production lowers furnace emissions.



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Overview

- Developed by MSS, Inc.
- Over 60 installations for glass recycling and aluminum recovery currently operating worldwide

Applications

Glass and aluminum industries to remove metallic contaminants from recycled glass cullet and granulated plastics and to recover aluminum cans from mixed recyclable streams in materials recovery facilities (MRFs)

Capabilities

- Operates automatically using a microprocessor that controls position, speed, and size of aluminum in waste.
- Available in modular units with capability to process 1200, 2000, and 3000 cubic feet/hour of commingled feed.
- Can control up to 256 detection channels and handle feed system widths of up to 256 inches.